

Letter to the Editor

Re: Autism—Ear Infections—Glue Ear—Sleep Disorders

Dear Editor:

This letter uses information from the medical literature to describe the relationship between sleep disorders and the two ear disorders that are common in autism.

Two thirds of a group of children with autism were reported to have reflux (Horvath, Papadimitriou, Rabszty, Drachenberg, & Tildon, 1999). In addition, glue ear and ear infections are prevalent in children with autism (Konstantareas & Homatidis, 1987).

The literature describes the mechanism by which sleep disorders cause reflux (Herr, 2001).

Reflux is caused when the repeated attempts to induce normal inspiration during a respiratory event results in increased effort by the diaphragm. This effort pulls open the lower esophageal sphincter permitting the gastric juices to be refluxed into the nasopharynx (Herr, 2001).

Tasker *et al.* (2002) reported gastric juices in the middle ear. Bluestone and Beery (1976) presented the concept of a pressure gradient that would open the eustachian tube and insufflate material into the middle ear. Apneas frequently end in a “snort,” which corresponds to the pressure gradient concept. Respiratory allergies exacerbate sleep disorders (Guilleminault, 1985), which is consistent with the reported fluctuations in hearing loss (Robertson, 1982). The sleep disorders involved are sleep apnea or upper airway resistance syndrome.

This author postulates that treating the sleep disorders that underlie glue ear and ear infections will eliminate or reduce their occurrence and thus also reduce the use of antibiotics and surgeries. In addition to improving the quality of life of the patients, sleep disorder treatment may eliminate a confounding factor in autism and facilitate research into the cause of that disorder.

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